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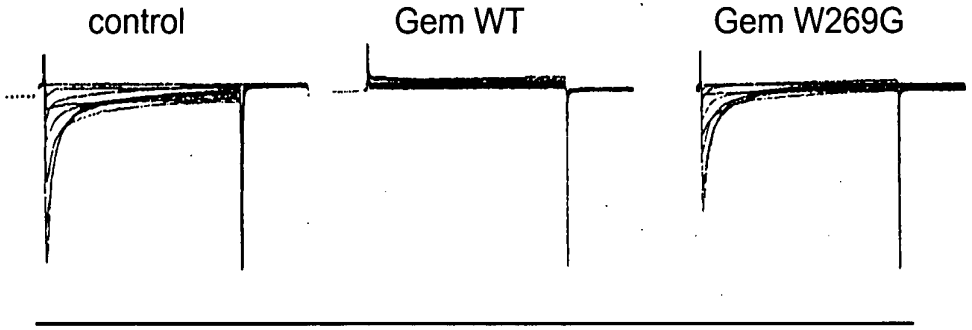


FIG. 1A

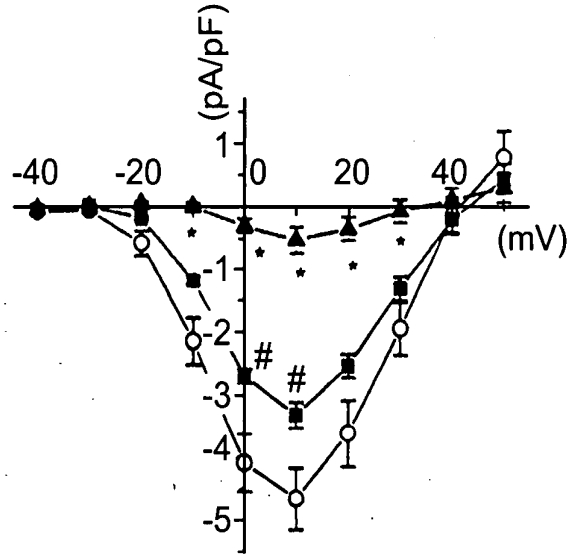


FIG. 1B

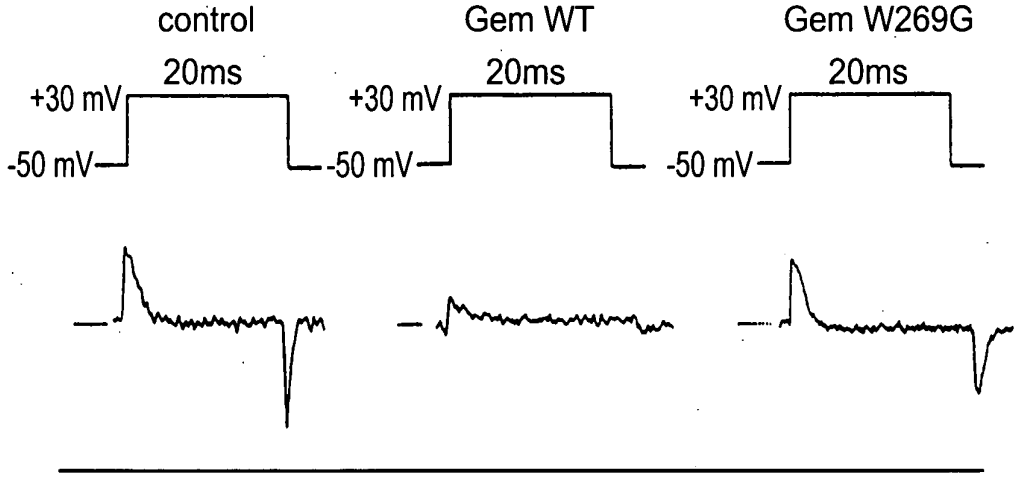


FIG. 1C

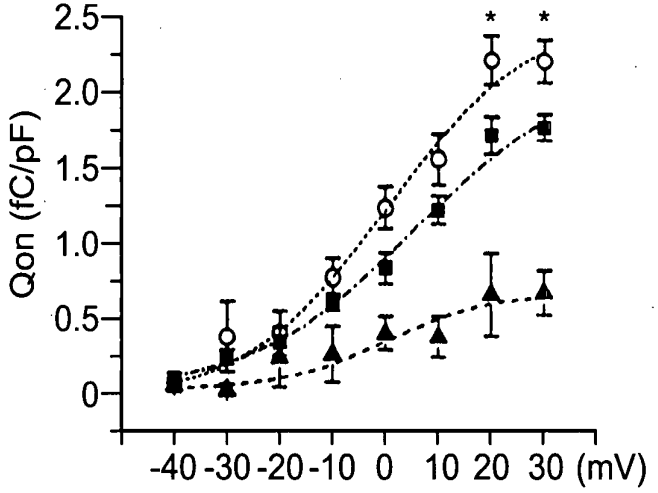


FIG. 1D

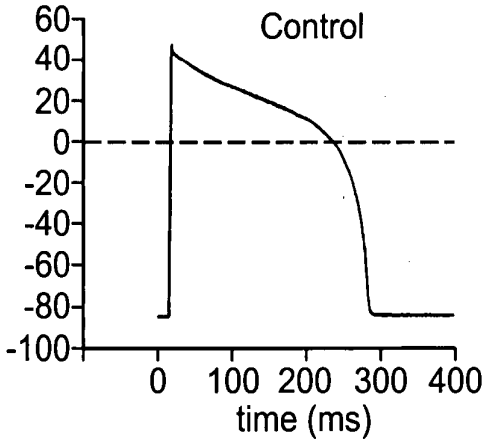


FIG. 2A

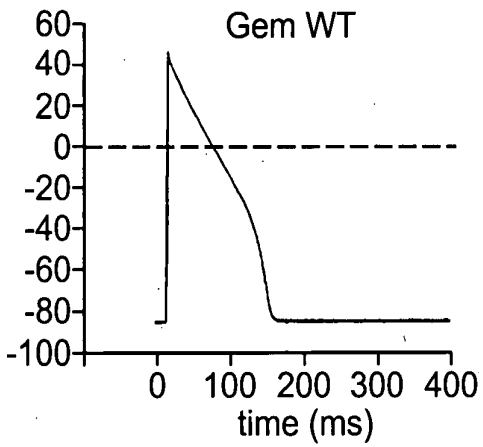


FIG. 2B

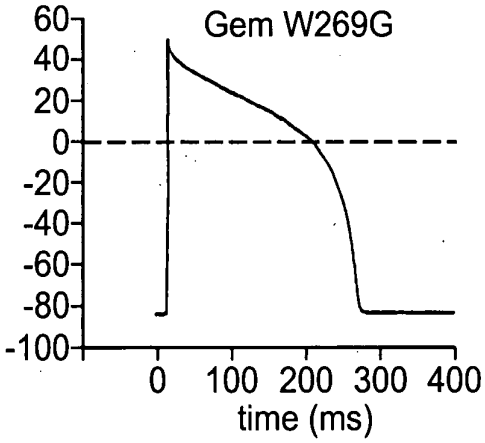
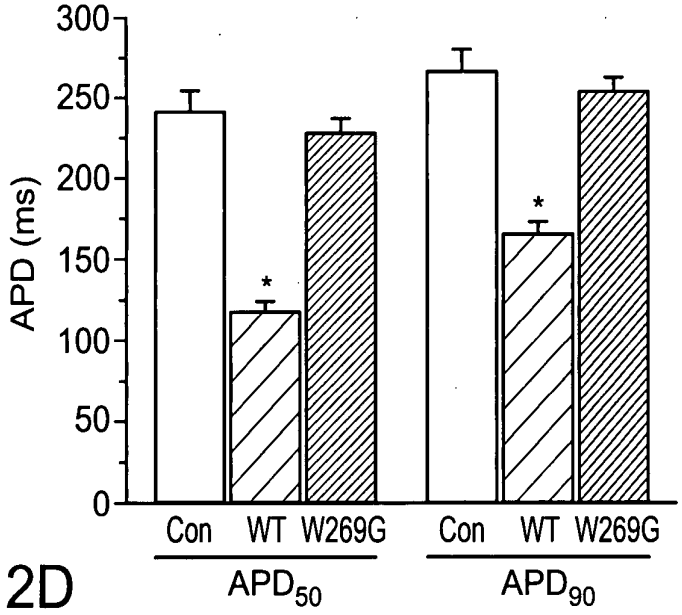


FIG. 2C



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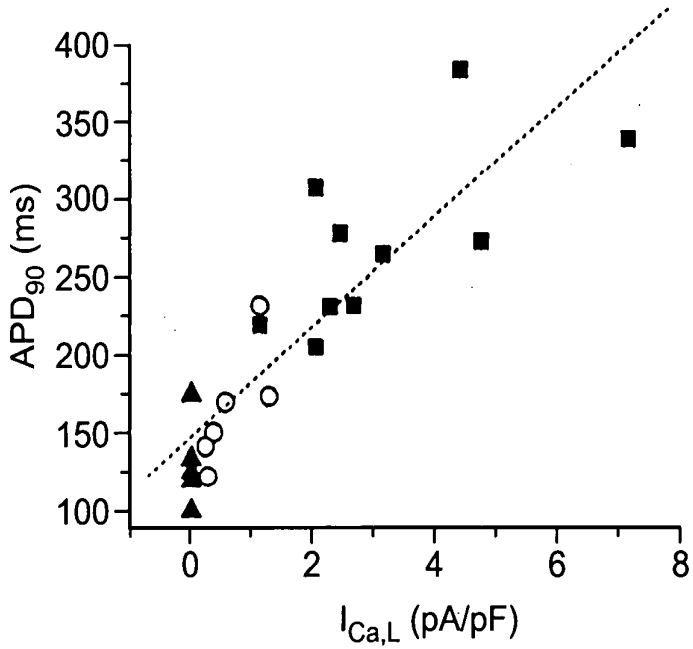


FIG. 2E

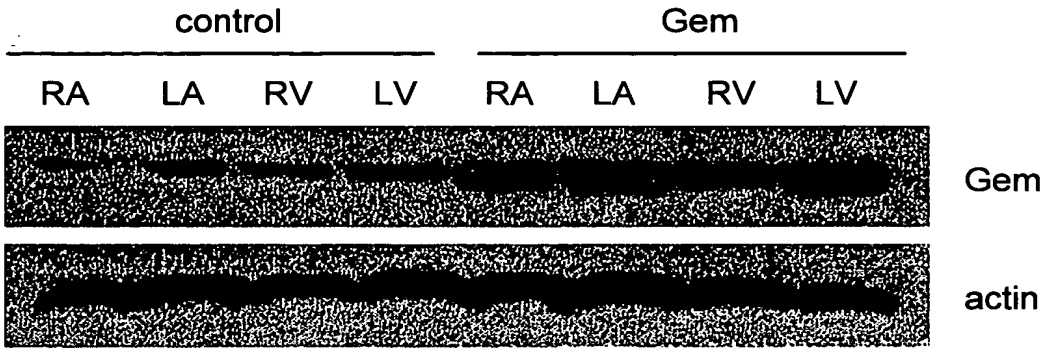


FIG. 3A

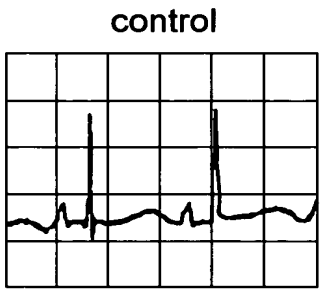
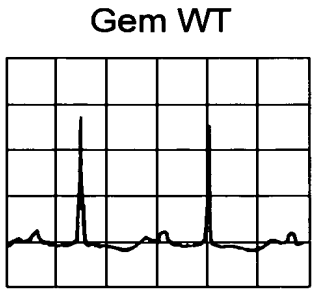


FIG. 3B



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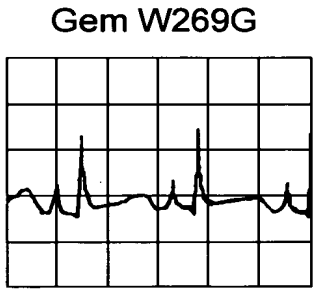
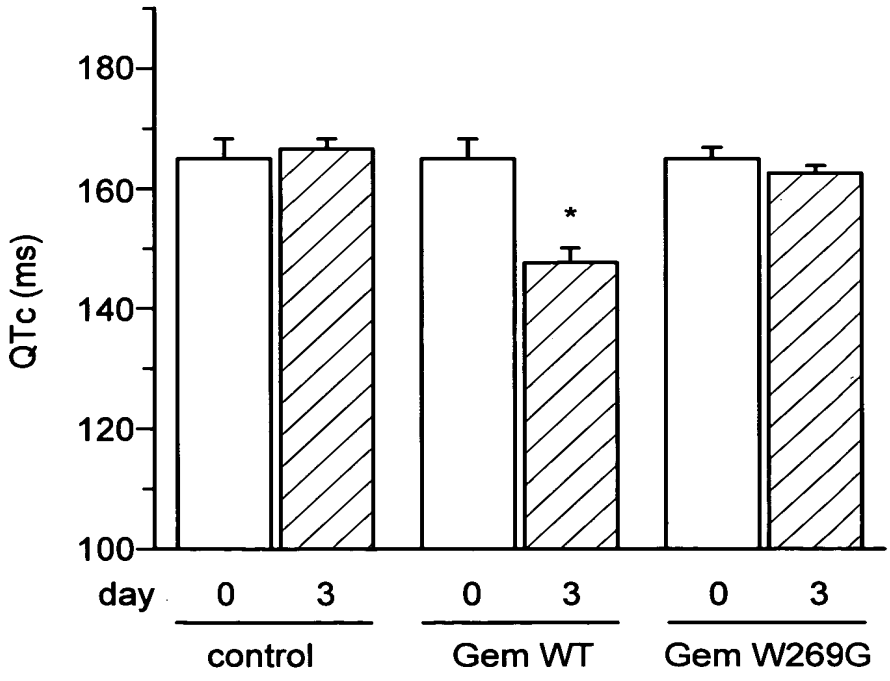


FIG. 3D



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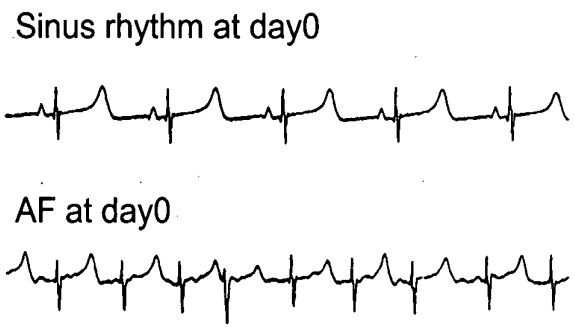

FIG. 4A

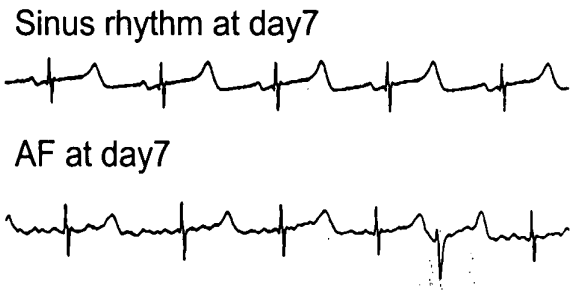

FIG. 4B

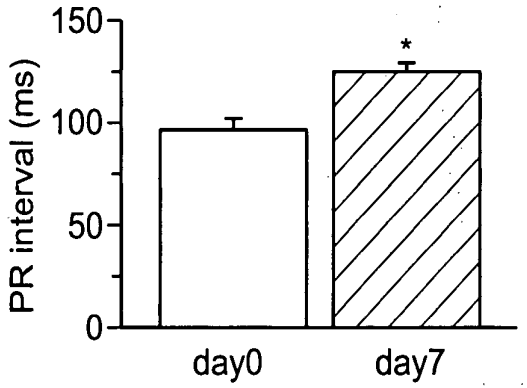

FIG. 4C

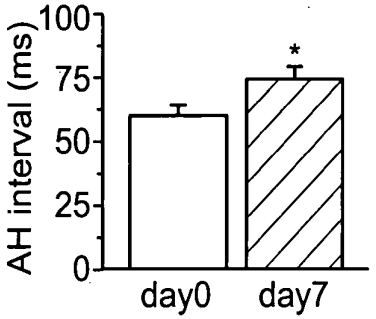

FIG. 4D

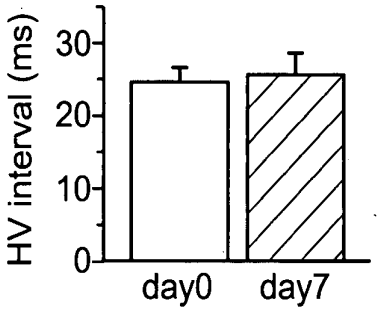

FIG. 4E

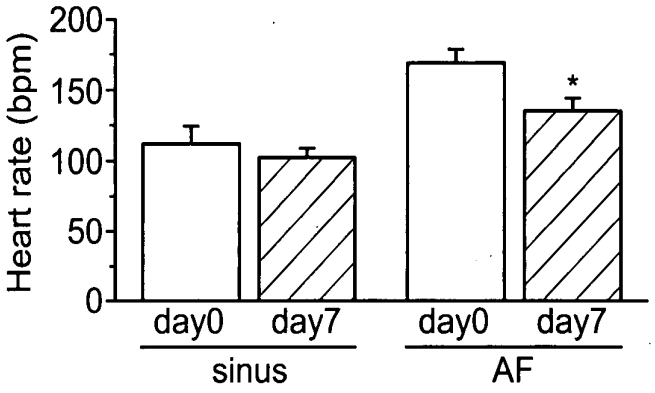

FIG. 4F

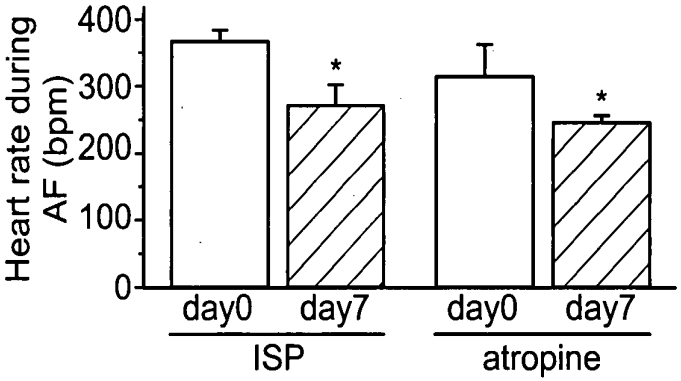

FIG. 4G

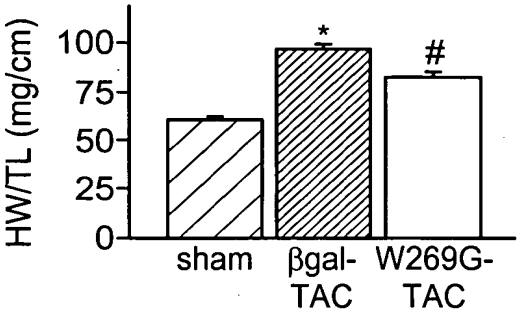

FIG. 5A

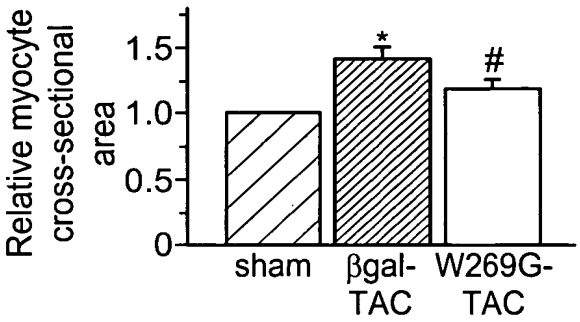

FIG. 5B

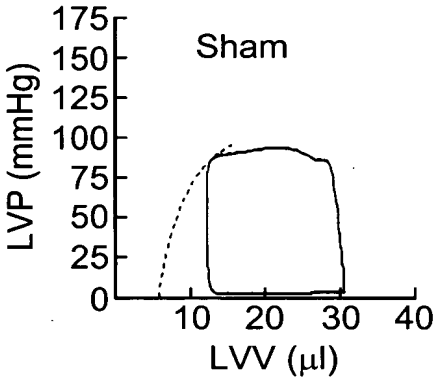

FIG. 5C

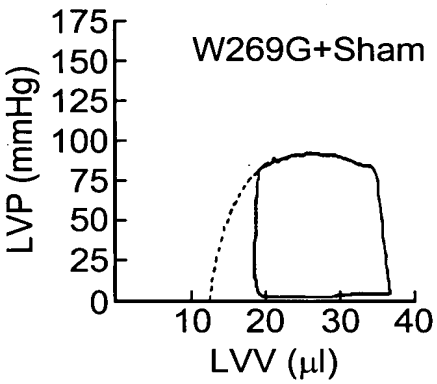

FIG. 5D

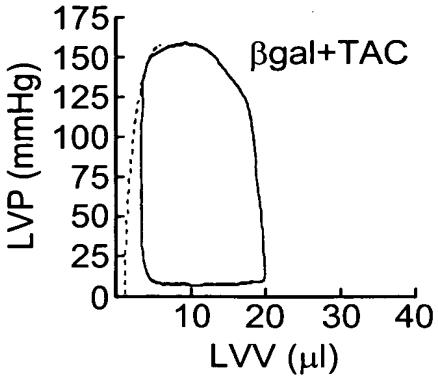

FIG. 5E

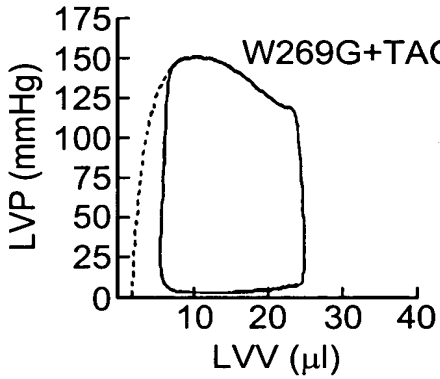

FIG. 5F

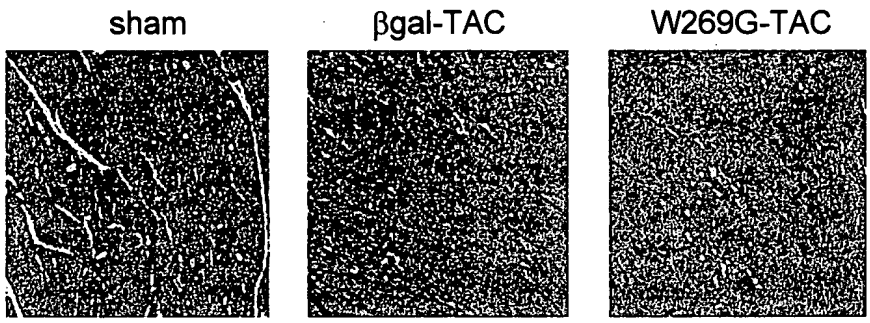
sham
βgal-TAC
W269G-TAC

FIG. 5G

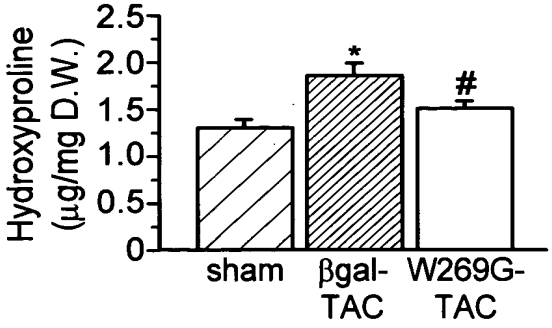
Hydroxyproline (μg/mg D.W.)
2.5
2.0
1.5
1.0
0.5
0
*
#
sham
βgal-TAC
W269G-TAC

FIG. 5H

Left ventricular function of βgal- and W269G-transduced mice after sham operation or TAC

	sham	βgal+TAC	W269G+sham	W269G+TAC
Parameter				
Number	10	7	4	7
Heart rate (bpm)	579 ± 11	590 ± 9	549 ± 13	530 ± 23 †
Systolic				
ESLVP (mmHg)	84.0 ± 1.9	145 ± 2.3*	81.7 ± 3.9	141 ± 6.9
ESV (μl)	12.6 ± 1.0	4.5 ± 0.5 *	19.1 ± 1.8	7.4 ± 1.8
EDV (μl)	30.8 ± 1.1	19.6 ± 2.2 *	37.4 ± 2.6	26.4 ± 2.7
EF (%)	59.2 ± 2.8	77 4 ± 1.2 *	51.3 ± 3.1	68.4 ± 4.7
dp/dt_{max} (mmHg/s)	10620 ± 831	17484 ± 1006 *	9410 ±518	14936 ± 1023
dp/dt_{max}/EDV (mmHg/s·μl^{-1})	351 ± 35	928 ± 69 *	268 ± 42	597 ± 64 †
E_{max} (mmHg/μl)	6.7 ± 0.67	32 ± 3.5 *	6.3 ± 0.27	22 ± 4.1
Diastolic				
EDLVP (mmHg)	5.8 ± 0.7	9.8 ± 0.7 *	5.4 ± 0.6	9.6 ± 0.7
dp/dt_{min} (mmHg/s)	-9362 ± 276	-15226 ± 1045 *	-10279 ±288	-12697 ± 646 †
Tau g (ms)	7.2 ± 0.4	7.7 ± 0.5	7.7 ±0.4	9.5 ± 0.7

Parameters are grouped into measures of systolic (contractile) and diastolic (relaxation).

ESLVP, end-systolic left ventricular pressure; EDLVP, end-diastolic left ventricular pressure; ESV, end-systolic volume; EDV, end-diastolic volume; EF, ejection fraction; g, glantz

*, $p<0.01$ vs. sham group, †, $p<0.05$ vs. βgal+TAC group

FIG. 6

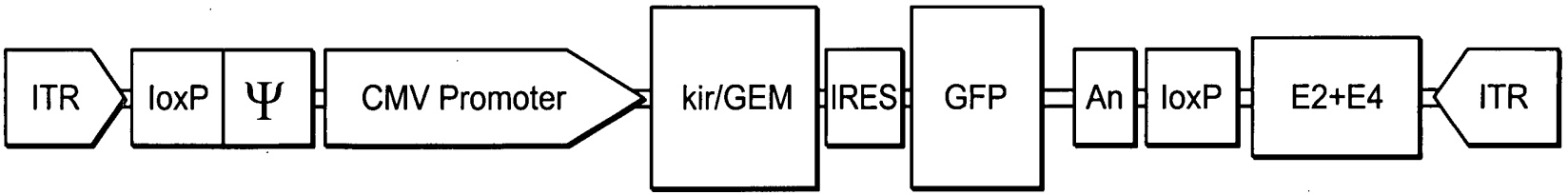

FIG. 7

Comparison of ECG parameters at 72 h after gene delivery
in control and kir/GEM-transduced animals

	control (n=5)	kir/GEM (n=9)	
RR(ms)	206.2 ± 7.4	214.0 ± 7.9	NS
PQ(ms)	56.2 ± 1.3	56.2 ± 2.5	NS
QT(ms)	159.0 ± 3.3	138.3 ± 3.6	p<0.01
QTc(ms)	166.9 ± 1.8	148.2 ± 2.3	p<0.001

FIG. 8

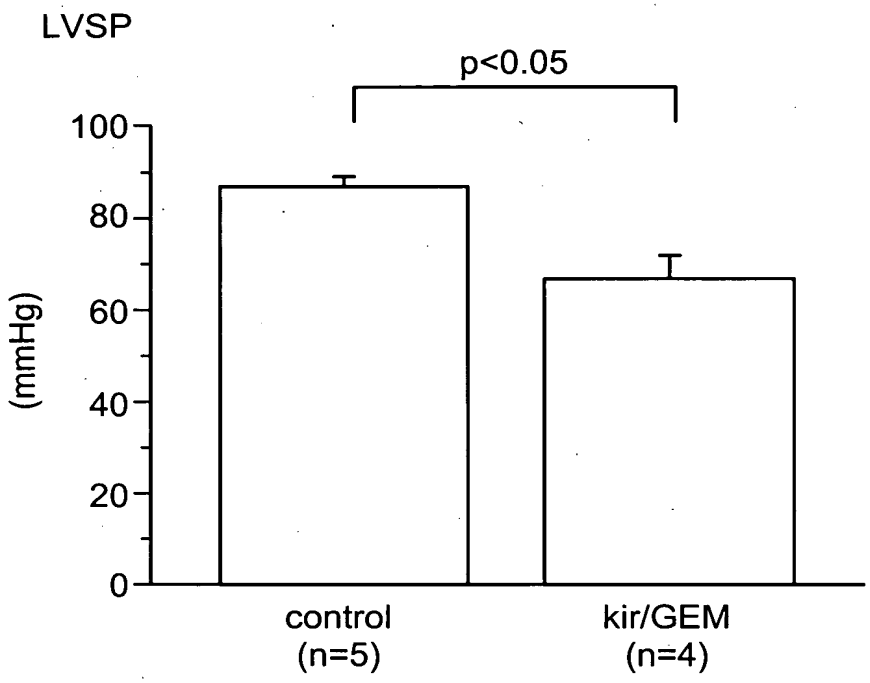
LVSP
p<0.05
100
80
60
40
20
0
(mmHg)
control
(n=5)
kir/GEM
(n=4)

FIG. 9A

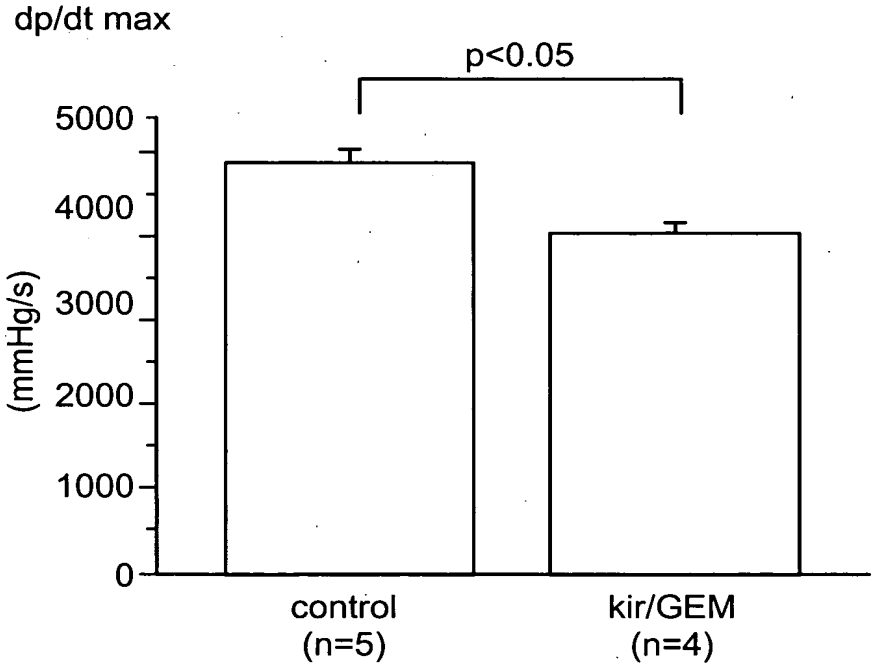
dp/dt max
p<0.05
5000
4000
3000
2000
1000
0
(mmHg/s)
control
(n=5)
kir/GEM
(n=4)

FIG. 9B